# INVESTING IN MENTAL HEALTH: EVIDENCE FOR ACTION



WHO Library Cataloguing-in-Publication Data

Investing in mental health: evidence for action.

1.Mental disorders – economics. 2.Mental health services – economics. 3.Financial support. 4. Health promotion – economics. I.World Health Organization.

ISBN 978 92 4 156461 8 (NLM classification: WM 30)

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Printed in Switzerland

#### ACKNOWLEDGEMENTS

This report was prepared by Dan Chisholm, working under the direction of Shekhar Saxena (Department of Mental Health and Substance Abuse, WHO). The feedback and comments on a draft version of the report by WHO colleagues (Natalie Drew, Devora Kestel, Matt Muijen, Sebastiana Nkomo, Nicole Valentine, Mark Van Ommeren) and external experts (Pamela Collins, Mary de Silva, Oye Gureje, Crick Lund, David McDaid, Alfredo Pemjean, Marc Suhrcke, Mark Tomlinson, Harvey Whiteford) are very warmly acknowledged.

Technical editing: David Bramley (Switzerland)

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# SUMMARY

Mental health and well-being are fundamental to our collective and individual ability as humans to think, emote, interact with each other, earn a living and enjoy life. They directly underpin the core human and social values of independence of thought and action, happiness, friendship and solidarity. On this basis, the promotion, protection and restoration of mental health can be regarded as a vital concern of individuals, communities and societies throughout the world.

However, current reality presents a very different picture. The formation of individual and collective mental capital – especially in the earlier stages of life – is being held back by a range of avoidable risks to mental health, while individuals with mental health problems are shunned, discriminated against and denied basic rights, including access to essential care. Accentuated by low levels of service availability, the current and projected burdens of mental disorders are of significant concern not only for public health but also for economic development and social welfare.

In this report, potential reasons for this apparent contradiction between cherished human values and observed social actions are explored with a view to better formulating concrete steps that governments and other stakeholders can take to reshape social attitudes and public policy. The report shows that a strong case can be made for investing in mental health – whether to enhance individual and population health and well-being, protect human rights, improve economic efficiency, or move towards universal health coverage. The report also identifies a number of barriers that continue to influence collective values and decision-making – including negative cultural attitudes towards mental illness and a predominant emphasis on the creation or retention of wealth (rather than the promotion of societal well-being).

In partnership with all relevant stakeholders, governments have a lead role to play in reshaping the debate about mental health, addressing current barriers and shortcomings, and responding to the escalating burden of mental disorders. Key actions that would mark a renewed commitment to promote, protect and restore mental health include: better information, awareness and education about mental health and illness; improved health and social services for persons with mental disorders; and enhanced legal, social and financial protection for persons, families or communities adversely affected by mental disorders.

# 1. INTRODUCTION

Mental health or psychological well-being is an integral part of an individual's capacity to lead a fulfilling life, including the ability to form and maintain relationships, to study, work or pursue leisure interests, and to make day-to-day decisions about education, employment, housing or other choices. Disturbances to a person's mental well-being can adversely compromise this capacity and the choices made, leading not only to diminished functioning at the individual level but also to broader welfare losses for the household and society.

Adding up these losses within or across countries results in some very large and disconcerting numbers. For example, mental, neurological and substance use disorders account for nine out of the 20 leading causes of years lived with disability worldwide (more than a quarter of all measured disability) and 10% of the global burden of disease (which includes deaths as well as disability) (1, 2). A recent analysis by the World Economic Forum estimated that the cumulative global impact of mental disorders in terms of lost economic output will amount to US\$ 16 trillion over the next 20 years (3). Such an estimate marks mental health out as a highly significant concern not only for public health but also for economic development and societal welfare.

Yet this concern is not being appropriately addressed or acted upon. Rather, the plight of individuals suffering from mental health problems is all too often met with indifference or outright prejudice by the communities and societies they live in. This neglect is further reflected in the levels of service provision for these vulnerable persons, which are abysmally low in many parts of the world. Even among those with very serious mental disorders such as schizophrenia, only one in 10 persons in low-income countries receives the treatment and care they need (4). While the extent of unmet need is daunting and the challenges of scaling up services are many, it is vital to recognize that there already exists a range of preventive and treatment strategies that have been shown to be safe, effective and affordable (5). Thus it is not the case that little or nothing can be done. Rather, much can be done with existing interventions, but to enable their effective deployment will require a major change in social attitudes and public policy. That is why this report – in support of WHO's *Comprehensive Mental Health Action Plan 2013–2020* (6) – calls for renewed public policy commitment to promote, protect and restore the mental health of populations.

This report is an update of an earlier WHO report that also carried the title *Investing in mental health* (7), but it now incorporates new evidence and additional arguments. As in the earlier report, *the primary aim is to provide national and international policy-makers, decision-makers and funding agencies with a synthesis of the arguments that have been and can be advanced in support of renewed action and investment.* 

Specifically, the report sets out:

- to present key reasons for investing in mental health from a range of perspectives, including public health, economic welfare and social equity (the conceptual case for investment);
- to highlight priorities for investment in mental health (the evidence-based case for investment).

# 2. MENTAL HEALTH AND SOCIAL VALUES:

THE CONCEPTUAL CASE FOR INVESTMENT

#### WHAT IS MENTAL HEALTH?

Mental health is an indispensable part of health, and has been defined by WHO as "a state of wellbeing in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community" (8).

Mental illness, on the other hand, refers to suffering, disability or morbidity due to mental, neurological and substance use disorders, which can arise due to the genetic, biological and psychological make-up of individuals as well as adverse social conditions and environmental factors.

"Investing in mental health" relates both to the promotion and protection of mental health and to the prevention and treatment of mental illness or disorders.

#### WHAT IS THE VALUE OF MENTAL HEALTH?

The importance of good mental health to individual functioning and well-being can be amply demonstrated by reference to values that are fundamental to the human condition (9, 10). The following values are particularly important:

#### INDEPENDENT THOUGHT AND ACTION:

The capacity of individuals to manage their thoughts, feelings and behaviour, as well as their interactions with others, is a pivotal element of the human condition. Unsurprisingly, health states or conditions that rob individuals of independent thought and action – such as acute psychosis, advanced stages of dementia or profound intellectual disability – are regarded as among the most disabling.

### PLEASURE, HAPPINESS AND LIFE SATISFACTION:

There is a longstanding and recently re-emphasized argument that happiness represents the ultimate goal in life and is the truest measure of well-being (11). Again, it is difficult, if not impossible, for a person to flourish and feel fulfilled in life when he or she is beset, whether temporarily or permanently, by health problems such as depression and anxiety.

### FAMILY RELATIONS, FRIENDSHIP AND SOCIAL INTERACTION:

Individuals' self-identity and capacity to flourish is deeply influenced by their social surroundings, including the opportunity to form relationships and engage with those around them (family members, friends, colleagues). Loneliness, social isolation and difficulties with communication all heighten the risk of developing or prolonging mental illness.

It is in everyone's interest to nurture and uphold these core human values, particularly in the formative stages of life. Since a basic tenet of a civil society is the provision of mutual support to the vulnerable and those in need, there is also a strong value basis for protecting, supporting and rehabilitating those unfortunate enough to succumb to mental illness.

A further social value is the respect with which different people, ideas or customs are accorded and treated. Discrimination, abuse and incarceration of the mentally ill – all too common in countries throughout the world – fly in the face of the cherished civic values of social solidarity, security and tolerance.

#### HOW MIGHT DIFFERENT SOCIAL VALUES INFLUENCE INVESTMENT IN MENTAL HEALTH?

Although the attainment and preservation of good mental health corresponds well to the core human and social values described above, individual and collective choices or decisions are influenced by a range of other factors or values too. For example, individuals may be prepared to do risky or stressful work in order to increase their income, or governments may prioritize security or economic growth over improvements in public health.

*Table 1* shows the primary concerns and values that underpin a range of perspectives on how social choices and decisions might be framed:

public health, economic welfare, economic growth, equity, sociocultural influence, and political influence (see Appendix 1 for a more detailed description).

Table 2 summarizes a number of arguments that support, and also potentially work against, greater investment in public mental health from these different perspectives. The table shows that there are solid arguments from all perspectives in favour of greater investment in public mental health, but there are also important barriers to consider – especially the sociocultural stigma that surrounds mental illness (since this can negatively affect appropriate action by governments) and the fact that macroeconomic performance often has priority over broader measures of societal welfare.

Perspective	Primary concerns/core values	Issues related to (mental) health
Public health	Promote, prevent, restore and maintain health	The attributable and avertable burden of disease
Economic welfare	Maximize individual and social well-being	Health as a key component of economic welfare
Economic growth and productivity	Improve the standard of living by increasing economic output (via more efficient production)	Effect of reduced health on production (labour) and consumption (health care)
Equity	Promote fairness in equality of opportunity	Health and access to health care as a human right
Sociocultural influence	Influence of beliefs, customs and attitudes regarding the way societies perceive and organize themselves	Perceptions or beliefs about the causes of illness (stigma)
Political influence	Formulate and implement state policies, uphold the law and, where necessary, intervene in private markets	Market failures in health care (e.g. incomplete information among service users)

#### TABLE 1. DIFFERENT VALUE BASES AFFECTING SOCIAL CHOICES AND DECISIONS

### TABLE 2. SUPPORTING ARGUMENTS FOR, AND POTENTIAL BARRIERS AGAINST, INVESTMENT IN MENTAL HEALTH

Perspective	Arguments favouring greater investment in public mental health	Potential barriers to greater investment in public mental health
Public health	Mental disorders are a major cause of the overall disease burden; effective strategies exist to reduce this burden	Mental disorders are not a leading cause of mortality in populations
Economic welfare	Mental and physical health are core elements of individual welfare	Other components of welfare are also important (e.g. income, consumption)
Economic growth and productivity	Mental disorders reduce labour productivity and economic growth	The impact of mental disorders on economic growth is not well known (and often assumed to be negligible)
Equity	Access to health is a human right; discrimination, neglect and abuse constitute human rights violations	Persons with a wide range of health conditions currently lack access to appropriate health care
Sociocultural influence	Social support and solidarity are core characteristics of social groupings	Negative perceptions and attitudes about mental illness (stigma)
Political influence	Government policies should address market failures and health priorities	Low expressed demand/advocacy for better services

#### WHAT CAN GOVERNMENTS DO TO IMPROVE POPULATION MENTAL HEALTH?

As the ultimate guardians of population health, governments have the lead responsibility to ensure that needs are met and that the mental health of the whole population is promoted. A further responsibility of - and justification for action by governments is to orchestrate corrections to markets that, if left uncontrolled, can give rise to outcomes that are socially unacceptable. Such market failures that governments can address in the context of mental health and health care include the impaired understanding of affected individuals regarding their condition, needs or rights (incomplete information), the unpredictable need for care (uncertainty), and the impacts of mental illness on other people or health conditions (spill-over effects) (12). Appendix 2 elaborates on these market failures in the context of mental health and health care.

Moreover, there is ample international evidence that mental disorders are disproportionately present among the poor, either as a result of a drift by those with mental health problems towards more socially disadvantaged circumstances (due to impaired levels of psychological or social functioning) or because of greater exposure to adverse life events among the poor (13). For governments and international development partners intent on reducing inequalities in access to or uptake of health (and other welfare-related) services – in short, moving towards universal health coverage – this provides a further significant justification for state intervention. In order to address current shortcomings in the efficient and fair allocation of societal resources, governments and other stakeholders can undertake a number of key actions, namely:

- provide better *information, awareness and education* about mental health and illness;
- provide better (and more) *health and social* care services for currently underserved populations with unmet needs;
- provide better social and financial protection for persons with mental disorders, particularly those in socially disadvantaged groups;
- provide better *legislative protection and social* support for persons, families and communities adversely affected by mental disorders.

The exact nature of these collective actions or responses (e.g. the extent to which governments actually offer social protection) will vary according to prevailing notions of social choice in a country and the existing health system structures and constraints. In other words, governments do not need to pay the entire mental health budget or provide all services themselves (a nongovernmental or private entity may also contribute), but governments do have an obligation to ensure that appropriate institutional, legal, financing and service arrangements are put in place to protect human rights and to address the mental health needs of the population.

#### CONCLUSION

At a purely conceptual level, a solid case can be made for investing in mental health, whether on the grounds of enhancing individual and population health and well-being, reducing social inequalities, protecting human rights, or improving economic efficiency. The empirical basis of each of these four arguments is presented in Section 3 of this report.

To date, these arguments - and the evidence behind them - have not been sufficiently well expressed or communicated to key stakeholders. As pointed out in a recent analysis (14), a number of steps need to be taken in order to further the cause of mental health as a pressing global health initiative. These steps include: the development of a unified voice and common framework for engaging in public discourse; the consistent application of an approach to mental health that is based on social justice and human rights; and the generation of an evidence base that not only includes strategies for treating persons with mental disorders but also extends to addressing stigma, the social determinants of mental health, and the wider impact of mental health improvements on economic development and social well-being.

# 3. MENTAL HEALTH ACTION AND INNOVATION:

THE EVIDENCE-BASED CASE FOR INVESTMENT The preceding section highlighted reasons why individuals and societies place value or importance on psychological health and well-being, why these values do not necessarily lead to action, and why governments have a responsibility to ensure that they do. If these reasons are accepted and governments and other key stakeholders are prepared to act, policy dialogue within countries can move on from the question "why?" to "what?" and "how?" (or indeed, "how much?").

### WHAT IS THE CURRENT STATE OF INVESTMENT?

Many low- and middle-income countries currently allocate less than 2% – or even 1% – of the health budget to the treatment and prevention of mental disorders (see Figure 1) (15). This is not remotely proportionate to the burden they cause, and appears to place a very low value on the psychological or emotional wellbeing of populations. The situation is particularly bleak in low-income countries where on average there is only one psychiatrist for every two million inhabitants (compared to one to every 12 000 inhabitants in high-income countries). Most of the funds that are made available by governments are specifically directed to the operational costs of specialized but increasingly outdated mental hospitals (that are commonly associated with isolation, human rights violations and poor outcomes) (15). This inevitably curbs the development of more equitable and costeffective community-based services.



### FIGURE1. MENTAL HEALTH SPENDING AS A PROPORTION OF TOTAL HEALTH SPENDING (15)

#### WHAT IS THE BASIS FOR RENEWED INVESTMENT IN MENTAL HEALTH SYSTEMS?

Decisions on investment or priorities in public health are usually based on the following criteria:

#### HUMAN RIGHTS PROTECTION:

This criterion relates to the extent to which investment and action directly contribute to upholding human rights or tackling human rights violations or infringements.

#### PUBLIC HEALTH AND ECONOMIC BURDEN:

Here the focus is the burden attributable to different disorders, both now and in the future. In other words, how serious are the health and economic consequences of not investing in mental health?

#### COST AND COST-EFFECTIVENESS:

Since resources for health are finite or scarce, it is important to assess the costs as well as social and economic outcomes associated with an investment of societal resources in health technologies or policies. Thus, the question here is how efficient is it to invest in mental health services and interventions?

### EQUITABLE ACCESS AND FINANCIAL PROTECTION:

This criterion relates to the extent to which investment improves equitable access and fairness in financial contribution to essential services. In other words, to what extent does the investment move the population closer to universal health coverage?

#### HUMAN RIGHTS PROTECTION

Individuals with mental health problems (together with their families) are subject to stigma, discrimination and victimization, and are vulnerable to violation of their rights (16). For example, individuals may encounter restrictions in the exercise of their political and civil rights, including their right to participate in public affairs and decision-making processes on issues that affect them. Unfortunately, much of this discrimination goes unreported, making it virtually impossible to accurately assess the size of the problem. In conflict situations or disasters, persons with mental health problems are at particular risk of having their rights abused (17).

Legislation that protects vulnerable citizens reflects a society that respects and cares for its people. Legislation that places policies and plans in the context of internationally accepted human rights standards and good practices can be an effective tool for promoting access to mental health care as well as for promoting and protecting the rights of persons with mental disorders. However, nearly two-thirds of countries either have no mental health legislation or have legislation that is over 10 vears old (15). A lot of outdated mental health legislation actually violates rather than protects the rights of people with mental disorders because it is geared towards safeguarding members of the public from "dangerous patients" (with the effect of isolating them rather than promoting their rights as people and citizens). Other legislation allows persons with mental disorders to be placed in long-term custodial care and to be given systematic treatment without informed consent, thus seriously impinging on their right to liberty and security of person and their right to exercise legal capacity.

The infringement of basic rights and entitlements represents the strongest single reason for appropriate corrective action by governments and civil society (including engagement and empowerment of organizations of people with mental disorders as well as families and carers). In particular, rigorous and ongoing procedural safeguards need to be in place to protect against the overuse and abuse of involuntary admission and treatment. To this end, the WHO QualityRights tool kit sets key human rights and quality standards that need to be met in all inpatient and outpatient mental health and social care facilities (18).

### PUBLIC HEALTH AND ECONOMIC BURDEN

Mental, neurological and substance use disorders are major contributors to morbidity and premature mortality throughout the world. Over 10% of the global burden of disease, measured in terms of years of healthy life lost, can be attributed to these disorders (2); when only years lived with disability are counted, the proportion more than doubles to 25% of the global burden (1). Not only do these conditions result in significant levels of disability or impaired functioning but they are highly prevalent. For instance, more than 650 million people worldwide are estimated to meet diagnostic criteria for common mental disorders such as depression and anxiety (1). Almost three guarters of this burden is in low- and middle-income countries.

The onset or presence of a mental disorder also increases the risk of disability and premature mortality from other diseases – including cardiovascular disease, diabetes, HIV/AIDS and other chronic conditions (11) – due to neglect of the person's physical health (by themselves, families or care providers), elevated rates of psychoactive substance use, diminished physical activity, an unhealthy diet and, in many cases, the side-effects of medication. Along with suicide, these chronic diseases produce a level of premature mortality far in excess of that of the general population; even in the relatively affluent context of Nordic countries, this mortality gap has been estimated at 20 years for men and 15 years for women (19).

Despite (and in no small part due to) low government health expenditures on mental health, the overall economic costs of mental disorders are also very high. At the household level, these costs come most directly in the form of reduced earnings plus additional – and sometimes "catastrophic" - out-of-pocket expenditure on health services (often leading to cuts in spending and investment in other areas or giving up household assets and savings). An analysis for India, for instance, found that half of the out-of pocket expenditures made by households for psychiatric disorders came from loans and a further 40% from household income or savings (20). The potentially catastrophic impact of private out-of-pocket payments for health services on the income and savings of households that include a person with mental illness has rarely been assessed. However, one study in the state of Goa in India found that 15% of women with a common mental disorder spent more than 10% of household income on health-related expenditures (21).

In terms of the impact on the national economy, mental disorders are associated with high rates of unemployment and also under-performance while at work. These both limit labour participation and output (a critical component of economic growth). A recent study by the World Economic Forum estimated that the cumulative global impact of mental disorders in terms of lost economic output will amount to US\$ 16 trillion over the next 20 years, equivalent to more than 1% of global gross domestic product (GDP) over this period (3). Studies from specific countries provide similarly sobering findings: health care costs and lost earnings amount to at least US\$ 50 billion in Canada and US\$ 75 billion in the United Kingdom (both equivalent to more than 2.5% of national GDP) (22, 23). For childhood mental health problems alone, the lifetime costs to the USA are expected to exceed US\$ 2 trillion as a result of diminished educational achievement and earnings (24).

#### COST AND COST-EFFECTIVENESS

The magnitude of the current and projected burden of mental, neurological and substanceuse disorders might be considered a sufficient reason alone for investment, but only if that investment can be channelled towards effective and affordable solutions. The knowledge base on what to do about the escalating burden of mental disorders has improved substantially over the past decade, with a growing body of evidence demonstrating both the efficacy and cost-effectiveness of key interventions for priority mental disorders in countries at different levels of economic development. In order to choose specific evidence-based interventions for priority disorders that can be readily scaled up and offer good value for money, information is required on cost-effectiveness, affordability and feasibility (see Box 1 for definitions of these terms).

This information is available at the global level – i.e. for countries of different income levels – for alcohol use (as a risk factor for disease), epilepsy, depression and psychosis (*see Appendix 3 for details*). From these interventions, a subset can be identified that is not only highly cost-effective but also feasible, affordable and appropriate for implementation within the constraints of the local health system:

#### **EPILEPSY:**

Diagnosis and treatment of epilepsy with first-line antiepileptic drugs is one of the most costeffective interventions for noncommunicable diseases. The treatment is very affordable and can feasibly be undertaken at the level of primary care.

#### BOX 1. CRITERIA USED TO IDENTIFY MENTAL HEALTH INVESTMENT PRIORITIES

**COST-EFFECTIVENESS** summarizes the efficiency with which an intervention produces health outcomes. A "very cost-effective" intervention can be defined as one that generates an extra year of healthy life for a cost that falls below the average annual income per person.

**AFFORDABILITY** is defined in terms of the actual cost of implementing interventions, with US\$ 0.50 per capita used as a threshold for considering an intervention to be "very affordable/low-cost", and US\$ 1 for "quite affordable/low-cost".

**FEASIBILITY** is defined by: (i) reach (capacity of the health system to deliver an intervention to the target population); (ii) technical complexity (technologies needed for an intervention); (iii) capital intensity (amount of capital required); and (iv) acceptability (including fairness and human rights).

#### **DEPRESSION:**

Depression is among the leading causes of disability in the world. The key interventions are treatment with (generically produced) antidepressant drugs and brief psychotherapy. Economic analysis has indicated that treating depression in primary care is feasible, relatively affordable (less than US\$ 1) and very cost-effective.

#### **PSYCHOSIS:**

Treating people with psychosis with older antipsychotic drugs plus psychosocial support is a quite cost-effective public-health intervention. It is feasible to implement it in primary care. However, some referral support is required, making it less affordable. Nevertheless, human rights considerations add to the need to make these interventions available.

#### HARMFUL ALCOHOL USE:

Harmful use of alcohol is a leading risk factor for disease globally. It contributes not only to substance use, mental disorders and injuries but also to noncommunicable conditions such as liver cirrhosis, certain cancers and cardiovascular diseases. Taxation of alcoholic beverages and restriction of their availability and marketing are among the most cost-effective, affordable and technically feasible strategies to implement.

A range of effective measures also exists for prevention of suicide, prevention and treatment of mental disorders in children, prevention and treatment of dementia, and treatment of substance use disorders (see Appendix 4 for details). More information is urgently needed about the expected costs and impacts, particularly in low- and middleincome countries. In the United Kingdom, evidence has already been assembled on the impact and return on investment for a variety of mental health promotion and prevention strategies. From a societal perspective, the pay-off for certain interventions – including early intervention for psychosis, suicide prevention, and learning programmes for conduct disorder – exceeds a ratio of 10 (i.e. for every £1 spent, there is more than £10 of benefit) (25).

What about the resources that are needed to implement an integrated package of cost-effective care and prevention? A recent estimate of US\$ 3-4 per head of population has been derived for the scaled-up delivery of a defined package in two geographical contexts (sub-Saharan Africa and South Asia), based on a comparative costeffectiveness analysis of 44 individual or combined interventions (26). The package comprised the treatment of epilepsy (with older first-line antiepileptic drugs), depression (with generic antidepressant drugs and psychosocial treatment), bipolar disorder (with the mood-stabilizer drug lithium), schizophrenia (with neuroleptic antipsychotic drugs and psychosocial treatment), and heavy alcohol use (via increased taxation and its enforcement, reduced access and, in sub-Saharan Africa, advertising bans and brief advice to heavy drinkers in primary care).

The impact of such an investment is reflected above all in improved health – an estimated 500–1000 healthy years of life for every million dollars spent. Placing even a very modest value on a healthy year of life – such as the average income per person – makes the return on investment highly favourable. Over and above the health gains, such an investment also brings other non-health benefits, most notably in terms of restored capacity to work (productivity gains) and reduced welfare support payments.

#### EQUITABLE ACCESS AND FINANCIAL PROTECTION (UNIVERSAL HEALTH COVERAGE)

An exercise carried out by the United States National Institute of Mental Health to identify a number of "grand challenges" in global mental health found that improved treatment and access to care was the single most pressing concern (27). Indeed, an overarching financing goal of many health systems currently undergoing transition is the pursuit of universal health coverage, which can be defined in terms of "access to key promotive, preventive, curative and rehabilitative health interventions for all at an affordable cost, thereby achieving equity in access" (28). The concept of universal health coverage can be broken down into three dimensions (see Figure 2):

#### DEPTH

### (The range of services or interventions available to members of the pool of insured persons):

This can be appropriately assessed by considering the cost and cost-effectiveness of services and interventions (as discussed above).

#### BREADTH

### (The proportion of the population covered by some form of financial protection):

It is well established that in low- and middleincome countries there is a sizeable gap in mental health service and financial coverage. For severe mental disorders, the treatment gap is at least 70% (4) and for common mental disorders it is even higher.

#### HEIGHT

### (The proportion of total costs covered by prepayment):

Private out-of-pocket spending represents a substantial proportion of total mental health expenditure in low- and middle-income countries, particularly when the largest element (mental hospital spending) is excluded (29). Direct out-of-pocket spending is an unfair and regressive way of paying for health care because it penalizes those least able to afford care (28).

In short, current coverage of essential mental health care can be characterized as inadequate, both in terms of access for those in need and in terms of financial protection or benefit inclusion. Accordingly, efforts to scale up community-based public mental health services can be expected to contribute strongly to the objective of greater equality in access because more people in need will be served and with less reliance on direct out-of-pocket spending.



#### FIGURE 2. PATHWAYS TO UNIVERSAL HEALTH COVERAGE (28)

In practical terms, there are several critical issues that need to be addressed in order to move closer to the goal of universal coverage in mental health. These are:

#### FINANCING/INSURANCE

A defined set of mental health conditions and interventions should be explicitly recognized and included in the essential list or package of health benefits offered to all citizens by governments, whether as part of the national tax-based health service or under the provisions of social or private insurance schemes (see Box 2 for an example from Chile).

#### SERVICE DELIVERY

Specialized secondary care should be available for referral cases and mental health care should be integrated into primary health care, maternal and reproductive health care, internal medicine and paediatrics, and emergency medicine, so that the majority of persons with mental health needs can enjoy local access to treatment and care.

#### HUMAN RESOURCES

Clinical tasks should be shared with nonspecialists so that the provision of essential care and support is not thwarted by the absence of specialist mental health providers.

### BOX 2. INCLUSION OF MENTAL DISORDERS IN CHILE'S UNIVERSAL HEALTH-CARE PLAN

As part of a broader process of health reform, in 2005 the Chilean parliament passed the Regime of Explicit Guarantees in Health Law which provides universal coverage for all citizens with regard to a package of medical benefits consisting of a prioritized list of diagnoses and treatments for 56 health conditions. This list of conditions (which is still growing) includes depression, alcohol/drug dependence and schizophrenia. The regime is enforceable by law and includes a set of guarantees concerning access, quality and financial protection – such as maximum waiting times, co-payments, and the mandatory offering of the benefits package by both private and public providers (30).

There is a strong international consensus that the shortage of financial and human resources for mental health requires a policy to integrate mental health care into general health care. Such integration provides opportunities for reducing the stigma of mental health problems, which in itself is a major barrier to accessing care. A recent report presents the justification for, and advantages of, providing mental health services in primary care, and describes how a range of health systems have successfully undertaken this transformation (31).

Because of the current shortage of specialist mental health personnel – a well-established barrier to scaling up mental health services – a key proposal to improve access to treatment is by task-sharing with nonspecialist health workers. There is an emerging evidence base that demonstrates how task-sharing with nonspecialist health workers can improve access to care. A study carried out for KwaZulu-Natal province in South Africa, for example, concluded that a tasksharing approach to the integration of mental health into primary health care can substantially reduce the number of health-care providers who would otherwise be needed to provide this care. Furthermore, the study found that the cost of additional community-based workers and a mental health counsellor at primary level can be offset by a reduction in the number of other specialist and nonspecialist health personnel (32).

Adequate training, supervision and support are of course paramount to the success of such an approach. This means that sufficient financial or other incentives need to be put in place to ensure sustainability of the approach. In addition, treatment guidance and training materials need to be geared towards nonspecialists; this has been achieved with the development and roll-out of WHO's *mhGAP Intervention Guide* (5).

#### CONCLUSION

By putting together an overall picture of these different criteria, as shown in Box 3, one sees a compelling case for urgent action and investment.

### BOX 3. SUMMARY OF KEY ARGUMENTS AND EVIDENCE FOR DIFFERENT INVESTMENT CRITERIA

#### HUMAN RIGHTS PROTECTION

- Individuals with mental health problems (together with their families) are commonly subjected to stigma, discrimination and victimization.
- Well-formulated and properly enforced policies and laws that are oriented to human rights prevent abuse and protect rights.

#### PUBLIC HEALTH AND ECONOMIC BURDEN

- Globally, more than 25% of all years lived with disability and over 10% of the total burden of disease is attributable to mental, neurological and substance use disorders.
- Left unaddressed, lost economic output due to these disorders will increase significantly from the already enormous levels.

#### COST AND COST-EFFECTIVENESS

- Feasible, affordable and cost-effective measures are available for preventing and treating mental, neurological and substance use disorders.
- An integrated package of cost-effective care and prevention can be delivered in communitybased settings of low- and middle-income countries for US\$ 3–4 per capita.

#### EQUITABLE ACCESS AND FINANCIAL PROTECTION

- Most persons with mental ill-health do not have adequate access to the essential mental health care they need; those who do use the services end up paying much of the bill.
- Integration of mental health care into publicly-funded primary care and task-sharing with nonspecialist health-care providers are appropriate and viable strategies for enhancing access.

## 4. SUMMARY OF KEY FINDINGS

This report set out to describe the place of mental health as a valued source of human capital or wellbeing in society, and to assess its suitability as a target for greater investment and action. The main points can be summarized as follows:

### MENTAL HEALTH AND SOCIAL VALUES

From a range of different analytical perspectives, there are sound arguments that support greater attention to and investment in mental health, including the protection of human rights, improved health and well-being, reduced social inequalities, and enhanced economic productivity and efficiency.

- Negative cultural attitudes towards mental illness persist and governments tend to emphasize the creation or retention of wealth rather than the promotion of societal wellbeing. This situation can be countered by presenting a stronger and more unified voice and insisting that the health and human rights of persons with mental health problems can and should be appropriately protected.
- As the ultimate guardians of population health, governments – in partnership with other key stakeholders – have a lead role to play in the enactment of national mental health action plans, including: the provision of better information, awareness and education about mental health and illness; improved services; and enhanced legal, social and financial protection for persons, families or communities adversely affected by mental disorders.

### MENTAL HEALTH ACTION AND INNOVATION

- Judged against core criteria for priorities in health (i.e. human rights, public health, economic efficiency and social equity) there is a compelling evidence-based case for investing in mental health. For each year of inaction and underinvestment, the health, social and economic burden will continue to rise. Doing nothing is therefore not a viable option.
- Mental health can be considered a focus of renewed investment not just in terms of human development and dignity but also in terms of social and economic development.

## REFERENCES

- Vos T et al. Years lived with disability (YLDs) for 1160 sequelae of 289 diseases and injuries 1990–2010: a systematic analysis for the Global Burden of Disease Study 2010. *Lancet*, 2012, 380:2163–2196.
- Murray CJL et al. Disability-adjusted life years (DALYs) for 291 diseases and injuries in 21 regions, 1990–2010: a systematic analysis for the Global Burden of Disease Study 2010. *Lancet*, 2012, 380:2197–2223.
- Bloom DE et al. The global economic burden of noncommunicable diseases. Geneva, World Economic Forum, 2011.
- Lora A et al. Service availability and utilization and treatment gap for schizophrenic disorders: a survey in 50 low- and middle-income countries. *Bulletin of the World Health Organization*, 2012, 90:47–54.
- mhGAP Intervention Guide for mental, neurological and substance use disorders in non-specialized health settings. Geneva, World Health Organization, 2011.
- Comprehensive Mental Health Action Plan 2013–2020. Geneva, World Health Organization, 2013.
- 7. *Investing in mental health.* Geneva, World Health Organization, 2003.
- Promoting mental health: concepts, emerging evidence, practice. Geneva, World Health Organization, 2005.
- Schwartz SH. Basic human values: theory, measurement, and applications. *Revue française de sociologie*, 2006, 47:249–288.

- Nussbaum MC. Women and human development: the capabilities approach. Cambridge, Cambridge University Press, 2000.
- Helliwell J, Layard R, Sachs J. World happiness report. New York, NY, The Earth Institute, Columbia University, 2012.
- Beeharry G et al. Outlining the scope for public sector involvement in mental health. (HNP Discussion Paper). Washington, DC, The World Bank, 2002.
- Lund C et al. Poverty and mental disorders: breaking the cycle in low- and middle-income countries. *Lancet*, 2011, 378:1502–1514.
- 14. Tomlinson M, Lund C. Why does mental health not get the attention it deserves? An application of the Shiffman and Smith Framework. *PLoS Medicine*, 2012, 9:e1001178.
- 15. Mental Health ATLAS 2011. Geneva, World Health Organization, 2011.
- 16. Thornicroft G et al (INDIGO study group). Global pattern of experienced and anticipated discrimination against people with schizophrenia: a cross-sectional survey. *Lancet*, 2009, 373:408–415.
- Silove D, Steel Z, Mollica RF. Detention of asylum seekers: assault on health, human rights, and social development. *Lancet*, 2001, 357:1436–1437.
- **18.** WHO QualityRights tool kit. Geneva, World Health Organization, 2012.
- Wahlbeck K et al. Outcomes of Nordic mental health systems: life expectancy of patients with mental disorders. *British Journal of Psychiatry*, 2011, 199:453–458.

- Mahal A, Karan A, Engelgau M. The economic implications of non-communicable disease for India. (HNP Discussion Paper). Washington, DC, The World Bank, 2010.
- Patel V et al. Prioritizing health problems in women in developing countries: comparing the financial burden of reproductive tract infections, anaemia and depressive disorders in a community survey in India. *Tropical Medicine* and International Health, 2007, 12:130-139.
- Lim KL et al. A new population-based measure of the economic burden of mental illness in Canada. *Chronic Diseases in Canada*, 2008, 28:92-98.
- McCrone P et al. Paying the price: the cost of mental health care in England to 2026. London, The King's Fund, 2008.
- Smith JP, Smith GC. Long-term economic costs of psychological problems during childhood. Social Science and Medicine, 2010, 71:110–115.
- 25. Knapp MRJ, McDaid D, Parsonage M, eds. Mental health promotion and mental illness prevention: the economic case. London, Department of Health, 2011.
- 26. Chisholm D, Saxena S. Cost effectiveness of strategies to combat neuropsychiatric conditions in sub-Saharan Africa and South East Asia: mathematical modelling study. *British Medical Journal, 2012*, 344:e609.
- 27. Collins PY et al. Grand challenges in global mental health. *Nature*, 2010, 475:27–30.
- World Health Report. Health systems financing; the path to universal coverage. Geneva, World Health Organization, 2010.

- 29. Mental Health ATLAS 2005. Geneva, World Health Organization, 2005.
- Bastias G et al. Health care reform in Chile. Canadian Medical Association Journal, 2008, 179:1289–1292.
- **31.** Integrating mental health into primary care: a global perspective. Geneva and Bangkok, World Health Organization and World Organization of Family Doctors, 2008.
- 32. Petersen I et al (Mental Health and Poverty Research Programme Consortium). A task shifting approach to primary mental health care for adults in South Africa: human resource requirements and costs for rural settings. *Health Policy and Planning*, 2011, doi:10.1093/ heapol/czr012.

#### APPENDIX 1. SIX PERSPECTIVES ON THE VALUE BASE FOR INDIVIDUAL OR COLLECTIVE DECISION-MAKING

- 1. Public health perspective: The defining goal from this perspective is to protect, improve and optimize individual and population health, where - to use WHO's definition - health is defined as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity". Historically, the main focus from this perspective was premature mortality (and the infectious diseases that contribute most to it); as a consequence of increased/longer survival, as well as greater exposure to unhealthy lifestyles, diseases of a chronic, disabling and noncommunicable nature are increasing, thereby prompting a major change in terms of public health priorities and policies.
- 2. (Micro)economic welfare perspective: Welfare economic theory posits that, subject to constraints such as income and time. individuals or populations seek to maximize "utility" (a term used to describe pleasure or economic welfare), which they do by consuming goods and services and by spending time with family and friends or in other forms of leisure. Health contributes to individual utility or social welfare, not only because people prefer to be more healthy rather than less healthy but also because being healthy enables them to better enjoy consumption or leisure activities. Thus health has an intrinsic value but also supports the capability of an individual or community to undertake desired activities or functions.
- 3. (Macro)economic growth perspective: The overarching concern for society from this perspective is to improve the standard of living in a country by increasing economic output through more efficient production. Ill-health can affect economic growth through its negative impact on the supply (and quality) of human capital or labour. Countries devote an increasing share of their national product or income to health care (which could otherwise be put to potentially more productive use). Economic growth is typically measured with reference to a country's gross domestic product (GDP). However, GDP is only a partial measure of economic welfare (and was not designed to measure this broader concept), since it does not include consumption that is not marketed, or the value of leisure or the value of health itself. There has been recent interest in developing alternative measures to GDP or income for assessing a country's success or progress, including the concept (and various indices) of gross national happiness.
- 4. Equity perspective: In contrast to the notion of maximizing societal utility, the ethical perspective derives from concerns over fairness in equality of opportunity (i.e. each person should be able to achieve a fair share of the opportunities available in society). Such entitlements are enshrined in international human rights instruments such as the Universal Declaration of Human Rights, which declares that all human beings are born free and equal in dignity and rights (including the right to health). Individuals with health problems who are prevented from accessing appropriate care and support - as a result of poverty or discrimination, for instance - experience a violation of the right to health.

- 5. <u>Sociocultural perspective</u>: This perspective reveals how beliefs, customs and social attitudes shape the way societies perceive, organize and further themselves (through, for instance, sociocultural norms governing kinship, reciprocity and spirituality). In many cultures, entrenched beliefs about the causes of mental illness (e.g. evil spirits or sorcery) engender negative attitudes and practices towards persons with mental illnesses.
- 6. Political perspective: The role of government is to formulate and implement state policies. At least in democratic or republican forms of government, policies are usually considered to be made in the national interest, to address issues where private markets have failed, and to reflect the demands or wishes of the electorate (thereby echoing prevailing social attitudes and values). How decisions actually get made varies considerably, however. State representatives are subjected to lobbying by special interest/advocacy groups which exert influence on final public policies or choices.

#### APPENDIX 2. MARKET FAILURES WITH RESPECT TO MENTAL HEALTH AND HEALTH CARE

 Information failures: Many people with mental illness lack insight into, or even recognition of, their health condition, needs or rights. This results in a lower level of demand or help-seeking than the person may need. The result is an undersupply of services that only collective action can redress. The stigma attached to a mental disorder – another form of information failure – produces a further impediment to the demand for services. The stigma that surrounds mental ill-health also has a negative influence on the political processes that determine priority-setting and resource allocation in health.

- 2. Risk and uncertainty: There are a number of concerns regarding paying for or insuring against mental illness, particularly in the case of chronic conditions such as schizophrenia or bipolar affective disorder. First, uninsured persons or households face potentially ruinous costs associated with health care expenses and lack of income from paid work. Second, persons who seek to mitigate this risk by buying private health insurance may find themselves excluded or restricted from receiving the services they need (because insurance companies remove or limit entitlements). Other relevant services - such as social care, special educational needs or housing - may also not be covered by insurance or may be subject to separate charges.
- 3. Negative spill-over effects: Persons with mental, neurological or substance use disorders are often the victims of abuse and violence by others, but can also pose a risk of violence or harm to others (e.g. by a person suffering a psychotic episode or behaving aggressively when under the influence of alcohol or illicit drugs). Such spill-over effects or externalized costs justify some form of public intervention. Spill-over effects often extend beyond the immediate victims of violence, abuse or crime to contact with criminal justice services. In the case of drug-use disorders, the harm may be to other people's health (e.g. HIV transmission via use of shared needles). Mental disorders can also have adverse impacts on physical health (e.g. the impact of perinatal depression on infant development). Furthermore, mental illness affects family members and friends who often provide informal care and support as a complement to, or replacement for, formal provision of health or social care. Informal caregivers may derive satisfaction from doing this but many also experience welfare losses themselves in the form of exhaustion, stress and reduced opportunities for work or leisure activities.

#### APPENDIX 3. IDENTIFYING INTERVENTIONS THAT ARE COST-EFFECTIVE, AFFORDABLE AND FEASIBLE

Health condition	Interventions	Cost-effectiveness (cost per healthy year of life gained) <sup>a</sup>	Affordability (cost per capita)ª	Feasibility (logistical or other constraints)
Epilepsy	Treat cases with (first-line) antiepileptic drugs	+++	+++	Feasible in primary care
Depression	Treat cases with (generic) antidepressant drugs plus brief psychotherapy as required	+++	++	Feasible in primary care
Harmful alcohol use	Restrict access to retail alcohol	+++	+++	Highly feasible
	Enforce bans on alcohol advertising			
	Raise taxes on alcohol			
	Enforce drink-driving laws (breath-testing)	++	++	Feasible in primary care
	Offer counselling to drinkers			
Psychosis	Treat cases with (older) antipsychotic drugs plus psychosocial support	++	+	Feasible in primary care; some referral needed

Notes: <sup>a</sup> Source of data: Chisholm and Saxena, 2012 (25).

#### KEY: Cost-effectiveness:

- +++ (very cost-effective; cost per healthy year of life gained < average income per person).
- ++ (quite cost-effective; cost per healthy year of life gained < 3 times average income per person).
- + (less cost-effective; cost per healthy year of life gained > 3 times average income per person).

#### Affordability:

- +++ (very affordable; implementation cost < US\$ 0.50 per person).
- ++ (quite affordable; implementation cost < US\$ 1 per person).
- + (less affordable; implementation cost > US\$ 1 per person).

#### APPENDIX 4. SUMMARY OF EVIDENCE OF EFFECTIVENESS FOR MHGAP PRIORITY CONDITIONS

#### EPILEPSY

Diagnosis and treatment of epilepsy with first-line antiepileptic drugs is one of the most costeffective interventions for noncommunicable diseases. The treatment is very affordable and is feasible in primary care.

#### DEPRESSION

Depression is currently one of the leading causes of disability in the world. The key interventions are treatment with (generic) antidepressant drugs and brief psychotherapy. Economic analysis has indicated that treating depression in primary care is feasible, relatively affordable (less than US\$ 1 per person) and very cost-effective.

#### PSYCHOSIS

Treating persons with psychosis with older antipsychotic drugs plus provision of psychosocial support is a quite cost-effective public-health intervention. It is feasible to implement in primary care but some referral support is required, making it less affordable. However, human rights considerations add to the imperative need to make these interventions available.

#### HARMFUL ALCOHOL USE (AS A RISK FACTOR FOR DISEASE)

Harmful use of alcohol is a leading risk factor for disease globally, contributing not only to substance use and mental disorders but also to injuries and noncommunicable conditions such as liver cirrhosis, certain cancers and cardiovascular diseases. Taxation of alcoholic beverages and restriction of their availability and marketing are among the most cost-effective, affordable and technically feasible strategies that can be implemented. Suicide is responsible for 1.3% of the global burden of disease. Around 844 000 deaths occur globally because of suicide. Effective interventions for prevention of suicide include restriction of access to means such as firearms and pesticides, reduction of the harmful use of alcohol as described above, and treatment of depression and substance use disorders. However the cost-effectiveness of these interventions is not yet established globally.

The evidence-based and effective interventions for substance use disorders are: brief intervention for alcohol- use disorders, treatment of opioid dependence with opioid agonist maintenance treatment, and reduction of the harmful use of alcohol as described above. Translating findings on interventions for substance use disorders in developed countries into disease-control priorities for developing countries presents major challenges as countries differ in their scale of substance use and in the resulting disease burden. For drug-use disorders, some information is available on the cost-effectiveness of some of these interventions in specific settings or countries but not globally. In addition, cultural beliefs and attitudes influence societal responses to drug use and dependence.

Many potential interventions exist for the prevention of developmental disorders in children but evidence on cost-effectiveness, affordability and feasibility is available for only a few interventions and from only some settings. lodine deficiency disorders (IDD) are an important cause of developmental disorders in children and it is wellrecognized that the most effective. cost-effective and sustainable way to achieve the virtual elimination of IDD is through universal salt iodization. Folic acid fortification of the food supply for prevention of neural tube defects was found to be highly cost-effective in the USA. In low-income countries, however, high capital and running costs may compromise cost-effectiveness, at least in the short run. Evidence for cost-effectiveness is

available also for rubella, haemophilus influenza and measles vaccines and the removal of lead from paint and fuel. Prenatal screening and selective pregnancy termination to prevent Down Syndrome are highly cost-effective under some conditions but raise ethical, social and cultural concerns that may preclude their applicability in some low- and middleincome countries. Moreover, screening is not only expensive but also has some negative health outcomes. Neonatal screening and treatment for congenital hypothyroidism is highly cost-effective in developed countries, where it provides a low-cost strategy for preventing intellectual disability.

No firm evidence indicates that any form of population-based intervention can prevent Alzheimer's disease or that the progression of cognitive decline in old age can be halted or reduced. However, there is some evidence available on effective interventions for caregivers. Training family caregivers in behavioural management techniques has been shown to reduce the level of agitation and anxiety in people with dementia. Interventions that have specifically targeted stress and depression among caregivers have shown positive results but the challenge is to develop culturally-appropriate interventions that can be delivered within existing resources in low- and middle-income countries. Treating underlying risk factors for cardiovascular disease can help prevent future cerebrovascular disease that could lead to vascular dementia. More evidence and research is required to assess the cost-effectiveness, affordability and feasibility of these interventions.

Mental health and well-being are fundamental to our collective and individual ability as humans to think, emote, interact with each other, earn a living and enjoy life. Yet currently the formation of individual and collective mental capital – especially in the earlier stages of life – is being held back by a range of avoidable risks to mental health, while individuals with mental health problems are shunned, discriminated against and denied basic rights, including access to essential care.

In this report, potential reasons for this apparent contradiction between cherished human values and observed social actions are explored with a view to better formulating concrete steps that governments and other stakeholders can take to reshape social attitudes and public policy around mental health.

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#### ISBN 978 92 4 156461 8

